

CLAIMS

1 1. A mouthguard for use by athletes in competition and the like,
2 comprising:

3 a first portion having a teeth engaging shape made from a
4 material having a freezing point of less than 130°F, said first portion
5 being formed into a tray having a generally U-shape, said first portion
6 having a tab extending out from the tray, said tray having a plurality of
7 holes therein;

8 a second portion formed on said first portion such that part of
9 said second portion extends through said plurality of holes in said first
10 portion to lock the two portions together, said second portion being
11 formed from a gel material having sufficient softness to protect the
12 user from damage during use in said athletic competition.

1 2. The mouthguard of claim 1, wherein said first portion is formed
2 from a thermoplastic material.

1 3. The mouthguard of claim 2, wherein said thermoplastic material
2 is an ethylene vinyl acetate copolymer.

1 4. The mouthguard of claim 3, wherein said ethylene vinyl acetate
2 copolymer has a freezing temperature of about 98.6 °F.

1 5. The mouthguard of claim 4, wherein said second portion is
2 formed from a gel selected from the group consisting of styrene block
3 copolymers and thermoplastic polyurethanes.

1 6. The mouthguard of claim 4, wherein said gel is a styrene block
2 copolymer.

1 7. A mouthguard for use by athletes in competition and the like,
2 comprising:

3 first portion means for engaging teeth and made from a material
4 having a freezing point of less than 130°F, said first portion means
5 being formed into a tray having a generally U-shape, said first portion
6 means having a tab extending out from the tray, said tray having a
7 plurality of holes therein;

8 second portion means for providing a cushion and formed on
9 said first portion means such that part of said second portion means
10 extends through said plurality of holes in said first portion means to
11 lock the two portion means together, said second portion means
12 being formed from a gel material having sufficient softness to protect
13 the user from damage during use in said athletic competition.

1 8. The mouthguard of claim 7, wherein said first portion means is
2 formed from a thermoplastic material.

1 9. The mouthguard of claim 8, wherein said thermoplastic material
2 is an ethylene vinyl acetate copolymer.

1 10. The mouthguard of claim 9, wherein said ethylene vinyl acetate
2 copolymer has a freezing temperature of about 98.6 °F.

1 11. The mouthguard of claim 10, wherein said second portion
2 means is formed from a gel selected from the group consisting of
3 styrene block copolymers and thermoplastic polyurethanes.

1 12. The mouthguard of claim 11, wherein said gel is a styrene block
2 copolymer.

1 13. A mouthguard for use by athletes in competition and the like,
2 comprising:

3 a first portion formed from a ethylene vinyl acetate copolymer
4 material and having a teeth engaging shape and having a freezing point
5 of less than 130°F, said first portion being formed into a tray having a
6 generally U-shape, said first portion having a tab extending out from
7 the tray, said tray having a plurality of holes therein;

8 a second portion formed from a block styrene copolymer and
9 mounted on said first portion such that part of said second portion
10 extends through said plurality of holes in said first portion to lock the
11 two portions together, said second portion being formed from a gel
12 material having sufficient softness to protect the user from damage
13 during use in said athletic competition.

- 1 14. The mouthguard of claim 13, wherein said ethylene vinyl acetate
- 2 copolymer has a freezing temperature of about 98.6 °F.